

WHAT IS CLAIMED IS:

1 1. A method for distinguishing between device types in a wireless local
2 area network (WLAN) in order to provide additional services to one type of device,
3 the method comprising:

4 obtaining a device type for a terminal in a wireless local area network;
5 and

6 providing device type-specific services to the terminal if the terminal is
7 a first device type.

1 2. The method claim 1, wherein obtaining a device type for the terminal
2 comprises fetching a device type associated with the terminal from a device profile.

1 3. The method of claim 2, wherein the device profile is stored in memory
2 at a WLAN access point.

1 4. The method of claim 1, wherein obtaining a device type for the terminal
2 comprises identifying if the terminal uses a power save mode.

1 5. The method of claim 1, wherein obtaining a device type for the terminal
2 comprises retrieving static information in a user database used in the authentication
3 procedure.

1 6. The method of claim 1, wherein obtaining a device type for the terminal
2 comprises receiving the device type during the authentication procedure for the
3 terminal.

1 7. The method of claim 1, further comprising:
2 requesting identity of a terminal in a wireless local area network
3 (WLAN) system;
4 receiving a response to the identity request;
5 authenticating the terminal based on the received response to the
6 identity request;

1 8. The method of claim 7, wherein the authentication procedure
2 comprises the Extensible Authentication Protocol (EAP).

1 9. The method of claim 7, wherein the authentication procedure
2 comprises the Remote Authentication Dial-In User Service (RADIUS).

1 10. The method of claim 1, further comprising forcing the terminal into an
2 unauthorized state which allows the terminal to only send an Extensible
3 Authentication Protocol (EAP) start message.

1 11. The method of claim 1, wherein obtaining a device type for the terminal
2 comprises detecting the device type from a propagation and signal information from
3 the terminal.

1 12. The method of claim 1, wherein obtaining a device type for a terminal
2 comprises receiving a signal initiated by the terminal, wherein the signal provides
3 device type information.

1 13. The method of claim 1, further comprising utilizing a plug-in module to
2 enhance the ability to determine whether the terminal is a stationary device or a
3 mobile device.

1 14. The method of claim 13, wherein the plug-in module comprises any
2 one of an 802.1X plug-in, a signal strength and delay plug-in, and a power saving
3 plug-in.

1 15. A system for determining device types and providing services for the
2 device types, the system comprising:

3 a supplicant node coupled to a wireless local area network (WLAN);
4 and

5 an access point associated with the WLAN, the access point
6 determining what device type the supplicant node is, wherein the access point
7 provides different services to the supplicant node if it is a first device type.

1 16. The system of claim 15, wherein the access point comprises node
2 profiles including information on which nodes in the WLAN are devices are mobile
3 devices and which nodes in the WLAN are stationary devices.

1 17. The system of claim 15, wherein the access point determines what
2 type of device the supplicant node is during the authentication process by which the
3 supplicant node authenticates itself.

1 18. The system of claim 15, wherein the access point determines what
2 type of device the supplicant node is by identifying if the supplicant node uses a
3 power save mode.

1 19. A system for communication in a wireless local area network (WLAN)
2 in which a WLAN access point distinguishes between different device types to
3 provide additional services to one type of device, the system comprising:
4 means for obtaining a device type for the terminal; and
5 means for providing device type specific services to the terminal if the
6 terminal is a first device type.

1 20. The system of claim 19, further comprising:
2 means for requesting identity of a terminal in a wireless local area
3 network (WLAN) system;
4 means for receiving a response to the identity request;
5 means for authenticating the terminal based on the received response
6 to the identity request;

1 21. The system of claim 19, wherein the device type is contained in a node
2 profile at an access point in the WLAN system.

1 22. The system of claim 19, wherein the specific services to the terminal
2 comprise multicast filtering.

1 23. The system of claim 22, wherein the multicast filtering is provided to
2 protect devices from Universal Plug and Play (UPnP) messages.

1 24. The system of claim 19, further comprising means for forcing the
2 terminal into an unauthorized state which allows the terminal to only send an
3 Extensible Authentication Protocol (EAP) start message.

1 25. The system of claim 19, wherein means for obtaining a device type for
2 the terminal comprises means for identifying if the terminal uses a power save mode.

1 26. The system of claim 19, wherein means for obtaining a device type for
2 the terminal comprises means for receiving the device type during the authentication
3 procedure for the terminal.

1 27. A method for device type differentiation in a wireless local area network
2 (WLAN) access point, the method comprising:

3 obtaining a terminal device type corresponding to a terminal in the wireless
4 area network; and

5 providing services specific to the terminal device type to the terminal.

1 28. The method of claim 27, wherein the terminal device type is stored in a
2 node profile in the WLAN access point.

1 29. A wireless local area network (WLAN) access point that provides
2 device type differentiation, the access point comprising:

3 means for obtaining a terminal device type corresponding to a terminal in the
4 wireless area network; and

5 means for providing services specific to the terminal device type to the
6 terminal.

1 30. The access point of claim 29, further comprising means for utilizing a
2 plug-in module to enhance the ability to determine whether the terminal is a
3 stationary device or a mobile device.

1 31. The access point of claim 30, wherein the plug-in module comprises
2 any one of an 802.1X plug-in, a signal strength and delay plug-in, and a power
3 saving plug-in.

1 32. The access point of claim 29, further comprising means for
2 authenticating the terminal.

1 33. The access point of claim 29, further comprising node profiles
2 containing terminal device type information.